SGCN and Habitat Stressors

Level 1 Threat Invasive and Other Problematic Species, Genes and Diseases

Level 2 Threat: Viral-Prion-induced Diseases

Class

Description: Viruses are small infectious agents that replicate only inside the living cells of an organism. Although viruses occur universally, each cellular species has its own specific range that often infect only that species. Most viruses co-exist harmlessly in their host and cause no signs or symptoms of disease. However, a number are important pathogens which can result in diseases which significantly reduce reproduction or increase mortality. Prions are infectious agents composed of protein in a misfolded form. They do not contain nucleic acids. All known prion diseases affect the structure of the brain and other neural tissue, they are mainly found in mammals, are currently untreatable and are universally fatal.

Species Associated With This Stressor:

Actinopterygii (Ray-finned Fishes)

SGCN Category

3:

Species: Notropis bifrenatus (Bridle Shiner)

2

2: 2

Report Date: January 13, 2016

Total SGCN: 1:

Severity: Moderate Severity

Actionability: Highly actionable

Notes: Unknown if BDS susceptible or a carrier of VHS, but many cyprinids are. VHS currently not presnet in

ME, but known occurences are not far away geographically. With continued vigilence, baitfish rules, dealer inspections and restrictions on live fish imports greatly assist with minimizing disease outbreaks.

Class Amphibia (Amphibians) **SGCN Category**

Species: Lithobates pipiens (Northern Leopard Frog)

2

Severity: Moderate Severity

Actionability: Actionable with difficulty

Notes: Rana virus; implicated as a contributing factor in the global decline of amphibian populations of mutiple

Habitats Associated With This Stressor:

Intertidal Mollusc Reefs Macrogroup

Habitat System Name: Gastropod Reef

Notes: Viral diseases (e.g. MSX) can limit life of oysters and other shellfish, currently existing in some Maine populations

Habitat System Name: Mussel Reef

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Habitat System Name: Oyster Reef

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Macrogroup Subtidal Mollusc Reefs

Habitat System Name: Gastropod Reef

Notes: Viral diseases (e.g. MSX) can lead to higher mortality or mortality at younger ages. Numerous viral infections affecting

multiple species have been documented in Maine.

Habitat System Name: Mussel Reef

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The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.